

**To:** Gwen Kittel [Gwen\_Kittel@natureserve.org]  
**Cc:** CN=Palmer Hough/OU=DC/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=Phil North/OU=R10/O=USEPA/C=US  
**Sent:** Tue 12/21/2010 11:46:50 PM  
**Subject:** RE: Bristol Bay question

## Ex. 5 - Deliberative

We are meeting with TNC next Wednesday (29th) at 10 am AKST to discuss spatial data. The call in number is **Non-Responsive** if you want to participate. I won't have anything from them before that.

Phillip North  
Ecologist  
Environmental Protection Agency  
Kenai River Center  
514 Funny River Road  
Soldotna, Alaska 99669  
(907) 714-2483  
fax 260-5992  
north.phil@epa.gov

"To protect your rivers, protect your mountains."

From: Gwen Kittel <Gwen\_Kittel@natureserve.org>  
To: Phil North/R10/USEPA/US@EPA  
Cc: Palmer Hough/DC/USEPA/US@EPA  
Date: 12/21/2010 01:33 PM  
Subject: RE: Bristol Bay question

Hi Phil,  
Can you send me any of those preliminary reports?  
Who are you working with at TNC? This will help us get up to speed on the background information.  
And yes we'd want watershed-wide and multi impact threats to be treated.  
Geographic question for you, It looks to me like reasonable boundaries for our assessment area would encompass  
Four 8 digit USGS HUCs  
19030302-- Mulchatna River  
19030303- Lower Nushagak River  
19030205 - Lake Clark  
19030206- Lake Iliamna

These boundaries are attached as jpgs, but you can view them on line at  
<http://water.usgs.gov/wsc/sub/1903.html>

Cheers  
Gwen

Gwen Kittel  
NatureServe  
Boulder, CO  
703-797-4812 voice

-----Original Message-----

From: North.Phil@epamail.epa.gov [mailto:North.Phil@epamail.epa.gov]  
Sent: Monday, December 20, 2010 3:23 PM  
To: Gwen Kittel  
Cc: Hough.Palmer@epamail.epa.gov  
Subject: Re: Bristol Bay question

Hi Gwen,

I would be interested in being trained so I can do analysis. It might also be useful to have the UAA folks trained. Becky, who is working with Dan, has GIS expertise so once the system is set up she may be able to be the technician who runs scenarios.

We have some geochemical data and some hydrologic data from the company and expect to get more in January. There may be a fine scale DEM included as well. But there is more threat here than the one mine. And we would like to look at more than mining. So yes, we would like to look at the watershed as appropriate for each threat.

The mining company, with the currently proposed mine, submitted a plan in 2006. Then they discovered the deposit was much bigger. They withdrew that proposal and have not submitted a new plan. We don't expect to get a new plan until 2012.

That is not to say we have no information. There is a plan for state roads published in the State of Alaska's Bristol Bay Area Plan. This is essentially a roadless area so all proposals are for new roads. I hope that will be useful. For mining we have the elements of the 2006 proposal (mine, waste facilities, road, pipeline and port). We know where, or can find out where, other exploration is occurring in the watershed. And we know a lot about mining technology. We also plan to comb the Corps of Engineers historic files to see what other activities have occurred in the watershed that we might consider a threat to salmon resources.

TNC has spatial data that they are willing to share. But I do not know what is included.

Do we need to discuss all this on a call?

Phil

Phillip North  
Ecologist  
Environmental Protection Agency  
Kenai River Center  
514 Funny River Road

Soldotna, Alaska 99669  
(907) 714-2483  
fax 260-5992  
north.phil@epa.gov

"To protect your rivers, protect your mountains."

From: Gwen Kittel <Gwen\_Kittel@natureserve.org>  
To: Phil North/R10/USEPA/US@EPA, Palmer Hough/DC/USEPA/US@EPA  
Date: 12/20/2010 11:47 AM  
Subject: Bristol Bay question

Hi Phil,  
For the Bristol Bay Cumulative watershed analysis, would you be interested in being trained so you can add data and run scenarios yourself?

We can include training and data transfer as part of the proposal. Or would you prefer a one-time analysis that we do for you?

Also, have you any idea what data may be available from what the mine company as collected? We are assuming that what they do have would be limited to the mine location and immediate surrounding environs, nothing watershed-side.

We'll also need the proposed mine footprint and depth, and the infrastructure they plan to build to serve the mine. Do you have access to any of that type of basic information?

Cheers,  
Gwen

Gwen Kittel  
NatureServe  
Boulder, CO  
703-797-4812 voice

-----Original Message-----

From: North.Phil@epamail.epa.gov [mailto:North.Phil@epamail.epa.gov]  
Sent: Monday, December 20, 2010 1:18 PM  
To: Gwen Kittel; Hough.Palmer@epamail.epa.gov  
Subject: Fw: Mining Experts

Gwen and Palmer,  
Here are some names of mining experts suggested by Dave Chambers.

Phillip North  
Ecologist

Environmental Protection Agency  
Kenai River Center  
514 Funny River Road  
Soldotna, Alaska 99669  
(907) 714-2483  
fax 260-5992  
north.phil@epa.gov

"To protect your rivers, protect your mountains."

----- Forwarded by Phil North/R10/USEPA/US on 12/20/2010 11:17 AM -----

From: "David Chambers" <dchambers@csp2.org>  
To: Phil North/R10/USEPA/US@EPA  
Date: 12/20/2010 10:51 AM  
Subject: Mining Experts

Phil:

Sorry to be so long in coming up with a couple of names, but I wanted to get you some quality recommendations that you could use.

Johnnie N. Moore, Professor of Geosciences, University of Montana,  
Missoula, MT

Email: Ex. 6 - Personal Privacy  
see:

[http://www.umt.edu/geosciences/faculty/moore/J\\_N\\_Moore\\_WebPage/J\\_N\\_Moore\\_WebPage.html](http://www.umt.edu/geosciences/faculty/moore/J_N_Moore_WebPage/J_N_Moore_WebPage.html)

David A. Dzombak Civil & Environmental Engineering Carnegie Mellon  
University Pittsburgh, PA  
Email: [dzombak@cmu.edu](mailto:dzombak@cmu.edu)  
See: <http://www.ce.cmu.edu/people/faculty/dzombak.html>

Dave

[attachment "Bristol Bay Study Area 8 digit Hucs.docx" deleted by Phil North/R10/USEPA/US]